TITLE OF THE INVENTION

IMAGE TRANSMISSION DEVICE AND INFORMING METHOD THEREOF

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is based upon and claims the benefit of priority from the prior Japanese Patent Application No. 2001-043825, filed February 20, 2001, the entire contents of which are incorporated herein by reference.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to an image transmission device provided with a function for transmitting an image obtained, for example, by reading an original document by a scanner to other internet facsimile terminal via a network in a predetermined internet facsimile system and a function for transmitting an electronic mail attached with the image to an arbitrary terminal such as other computer terminal or the like via a network despite an Internet facsimile system and its informing method thereof.

2. Description of the Related Art

As a method for communicating an image to a remote place, a digital complex machine is popular by the use of a PSTN (Public Switched Telephone Network) and an ISDN (Integrated Services Digital Network). In the first instance, this kind of digital complex machine can be easily operated and secondary, this kind of

digital complex machine can inform a message even if a party is absent. Therefore, this kind of digital complex machine is widely distributed not only in a business field but also in a household.

5   A communication standard of a facsimile by the use of the PSTN and the ISDN is recommended as a standard of a G3 facsimile and a G4 facsimile.

A first advantage of such a conventional facsimile is to enable the data to be transferred at the highest

10   communication speed allowable by a bandwidth of a communication line by securing a communication line with respect to a facsimile directly at a receiving side. A second advantage thereof is to enable to check that the data has been certainly transmitted by

15   directly communicating with a party. Further, a third advantage of such a conventional facsimile is to enable to transmit the data certainly in order to perform a capacity negotiation to check whether a transmission data system is allowable at the receiving side or not.

20   On the other hand, as the Internet has been generalized, a service to use Internet in place of a conventional circuit exchange network has been popular.

Particularly, when the transmission distance and the data amount are large, it is possible to keep a

25   communication cost lower by transmitting the data via Internet. Therefore, an Internet digital complex machine provided with a function to transmit and

receive the image via the Internet in addition to a function owned by a normal digital complex machine has appeared.

This kind of Internet digital complex machine generally transmits the image data as an attached file of the electronic mail through the Internet. Therefore, the image data is transferred without connection. Accordingly, a negotiation performed by the G3 facsimile and the G4 facsimile is not performed and a communication form is taken such that a transmission side unilaterally transmits the image.

As described above, the Internet facsimile transfers the image by the use of the electronic mail. Accordingly, even when a terminal of a transmission destination is not an Internet facsimile terminal, it is possible for a terminal of a computer such as a personal computer or the like to receive the image transfer if this computer terminal has a function to receive the electronic mail.

However, an image file format to be used for the Internet facsimile is not popular for a computer terminal, so that it is difficult for the computer terminal to process the image file format properly.

Therefore, in order to transfer the image to the computer terminal, it is considered that a function to convert the image data into a file format, for example, a PDF (Portable Document Format) or the like, which is

standard for the computer terminal, is provided and
such a file format for a computer and a file format for
the Internet facsimile are selectively used. However,
a user should designate which file format should be
5   used, so that this involves a problem such that a
normal image communication is not performed if the
user's designation of the file format is wrong.

BRIEF SUMMARY OF THE INVENTION

An object of the present invention is to provide
10   an image transmission device with a good usability and
its informing method.

According to the embodiment of the invention, on
the basis of the class information stored in an
information storing unit in association with a mail
15   address which is designated as a transmission
destination, the confirmation result of the system
designation is informed.

Additional objects and advantages of the invention
will be set forth in the description which follows, and
20   in part will be obvious from the description, or may be
learned by practice of the invention. The objects and
advantages of the invention may be realized and
obtained by means of the instrumentalities and
combinations particularly pointed out hereinafter.

25   BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

The accompanying drawings, which are incorporated
in and constitute a part of the specification,

illustrate embodiment of the invention, and together with the general description given above and the detailed description of the embodiment given below, serve to explain the principles of the invention.

5 FIG. 1 is a perspective view of a digital complex machine, which is constructed by applying an image transmission device according to an embodiment of the present invention;

FIG. 2 is a block diagram for illustrating a

10 construction of a substantial part of a digital complex machine, which is constructed by applying an image transmission device according to an embodiment of the present invention;

FIG. 3 is a view for illustrating an example of

15 the storage data of a transmission destination terminal type storage table which is set in an information storing unit shown in FIG. 2;

FIG. 4 is a flow chart for showing a processing procedure when performing the process upon receiving

20 the mail by a CPU shown in FIG. 2;

FIG. 5 is a flow chart for showing a processing procedure upon performing the image transmission process by a CPU shown in FIG. 2; and

FIG. 6 is a flow chart for showing a processing

25 procedure upon processing the image transmission by a CPU shown in FIG. 2.

DETAILED DESCRIPTION OF THE INVENTION

Then, an embodiment of the present invention will be described with reference to the drawings below. FIG. 1 is an appearance view of a digital complex machine, which is constructed by applying an image transmission device according to an embodiment of the present invention.

In FIG. 1, a reference numeral 1 is a digital complex machine. A original document mounting table 2 is mounted on an upper surface of this digital complex machine 1. This original document mounting table 2 is composed of a glass and a scanner 17 is provided within it. A reference numeral 3 is a discharge unit, from which a copied paper is discharged, and a reference numeral 24 is an operating/displaying unit. Alternatively, in a steel case located at a lower side of the discharge unit 3, a CPU 11, a printer, … or the like are mounted to be described later with reference to FIG. 2.

In the next place, with reference to FIG. 2, a block diagram illustrating a construction of a substantial part of this digital complex machine will be described. The digital complex machine 1 comprises a CPU 11, a ROM 12, a RAM 13, an information storing unit 14, an image storing unit 15, a coding/decoding unit 16, a scanner 17, a printer 18, a modem 19, an NCU 20, an telephone controlling unit 21, a circuit signal

detecting unit 22, a LAN interface 23, an operating/ displaying unit 24 and a clock unit 25.

Then, the a CPU 11, the ROM 12, the RAM 13, the information storing unit 14, the image storing unit 15, the coding/decoding unit 16, the scanner 17, the printer 18, the modem 19, the NCU 20, the circuit signal detecting unit 22, the LAN interface 23, the operating/displaying unit 24 and the clock unit 25 are connected to each other via a system bus 26. Additionally, the modem 19 and the telephone controlling unit 21 are connected to the NCU 20 and the circuit signal detecting unit 22 each is connected to the telephone controlling unit 21.

The CPU 11 realizes the operation as the digital complex machine by performing the control processing in order to generally control each unit on the basis of the control program which is stored in the ROM 12.

The ROM 12 stores the control program or the like of the CPU 11.

The RAM 13 is used as a work area or the like to store various information necessary for the CPU 11 to perform various processes.

The information storing unit 14 uses, for example, a flash memory or the like and it stores various setting information and other information. A portion of the storage area of this information storing unit 14 is set in a transmission destination terminal type

storage table as an address storing means and a class information storing means. As shown in FIG. 3, in addition to an area to store a mail address, an area to store the terminal type information indicating whether

5   a terminal having the mail address is an internet facsimile (IFAX) or other terminal in association with each mail address is set in this transmission destination terminal type storage table.

     For example, the image storing unit 15 uses a mass

10   storage DRAM and a mass storage hard disk device or the like and it temporarily stores the received image data and the image data waiting for transmission.

     The coding/decoding unit 16 decodes the image data to which is coded for compressing the redundancy as

15   well as performs the coding processing for compressing redundancy with respect to the image data.

     The scanner 17 reads a transmitter original document and generates the image data indicating this transmitter original document.

20   The printer 18 prints out an image indicated by the image data on the recording paper.

     The modem 19 generates a facsimile transmission signal by modulating the image data and generates a command transmission signal by modulating a command to

25   be given from the CPU 11. The modem 19 transmits these transmission signals to a PSTN subscriber's line 2 via an NCU 20. Alternatively, the modem 19 demodulates the

facsimile transmission data, which arrives via the PSTN subscriber's line 2 and is given via the NCU 20, to reproduce the image data and demodulates the command transmission signal to reproduce a command.

The PSTN subscriber's line 2 contained in the PSTN 3 is connected to the NCU 20. Further, the NCU 20 monitors a condition of this connected PSTN subscriber's line 2 and performs the transmission process of this connected PSTN subscriber's line 2 to a network or the like. Alternatively, the NCU 20 sets a level as well as equalizes a facsimile transmission signal to be transmitted to the PSTN subscriber's line 2.

An external telephone set 4 is connected to the telephone controlling unit 21 according to need. Then, the telephone controlling unit 21 performs a well known control process so that a call can be established by the use of the connected external telephone set 4 through the PSTN subscriber's line 2.

The circuit signal detecting unit 22 receives a signal arriving through the PSTN subscriber's line 2 via the NCU 20 and the telephone controlling unit 21 to detect the arrival of a predetermined signal.

Internet 7 is connected to the LAN interface 23 via a LAN circuit 5 and a mail server 6. Then, the LAN interface 23 transmits the data via the LAN circuit 5 or the Internet 7.

The operating/displaying unit 24 has a key inputting unit for receiving various indicating inputs with respect to the CPU 11 by the user and a display unit for displaying various information to be informed

5   to the user under the control of the CPU 11 or the like.

The clock unit 25 always performs the clock operation and outputs the current time information indicating the current time.

10   As a control means to be realized by operating the CPU 11 on the basis of a control program stored in the ROM 12, the digital complex machine according to the embodiment has a first transmission means, a second transmission means, a mail receiving means, a class

15   information generating means, a first informing control means and a second informing control means in addition to a well known and popular one in the digital complex machine.

Here, the first transmission means performs the

20   image transmission (hereinafter, referred to as Internet facsimile transmission) according to an Internal facsimile system. That is, this first transmission means converts the image data into an image file in a TIFF (Tagged Image File Format) system

25   in accordance with, for example, an ITU-T (International Telecommunication Union-Telecommunication Sector) which is defined by an

Internet facsimile system and further, the first
transmission means generates an electronic mail in a
predetermined format (i.e., a format defined by the
Internet facsimile system) attached with this image
file to transmit it. Further, when the user designates
the Internet facsimile system as a transmission system,
this first transmission means performs the Internet
facsimile transmission. Alternatively, this first
transmission means has a transmission confirmation mode
as a first mode. This transmission confirmation mode
adds predetermined information, which requires the
transmission destination to return a response of an
electronic mail as a transmission confirmation notice
defined by the Internet facsimile system, to the
electronic mail. Then, the first transmission means
decides to use this transmission confirmation mode or
not depending on the mode designation by the user.
Thus, when this transmission confirmation mode is not
used, the transmission destination is not required to
return a response of the electronic mail as the
transmission confirmation notice and this condition
corresponds to a second mode.

The second transmission means performs the image
transmission to the computer terminal despite an
Internet facsimile system. That is, the second
transmission means converts the image data into an
image file in a standard file format by the computer

terminal and further, the second transmission means
generates an electronic mail attached with this image
file in an arbitrary format to transmit it.
Alternatively, according to the embodiment, it is
assumed that this second transmission means uses a PDF
format as a file format and the image transmission due
to this second transmission means is refereed to as the
PDF transmission. Then, this second transmission means
performs the PDF transmission when the user designates
a non-Internet facsimile system as a transmission
system. Alternatively, this second transmission means
has the transmission confirmation mode. This second
transmission confirmation mode adds the predetermined
information, which requires the transmission
destination to return a response of an electronic mail
as a transmission confirmation notice defined by a
general electronic mail protocol which is different
from the Internet facsimile system, to the electronic
mail. Then, the second transmission means decides to
use this transmission confirmation mode or not
depending on the mode designation by the user.

The mail receiving means receives the electronic
mail, which is arrived via the LAN circuit 5 and is
addressed to itself.

In the case that the image file is attached to the
received electronic mail, the class information
generating means identifies whether the terminal of the

transmitter is an Internet facsimile terminal or a computer terminal other than the Internet facsimile terminal on the basis of a file format of this attached image file. Then, the class information generating means stores the terminal type information indicating the identification result in the transmission destination terminal type storage table of the information storing unit 14.

If a mail address designated as a transmission destination is stored in the transmission destination terminal type storage table of the information storing unit 14 when the image transmission is required and further, the terminal type information is stored in association with this mail address, the first informing control means estimates whether the transmission system designated by the user on the basis of this terminal type information is appropriate or not. Then, if it is estimated that the transmission system is not appropriate, the first informing control means makes the operating/displaying unit 24 display a message to prompt the user to check the designation of the transmission system.

The second informing control means makes the operating/displaying unit 24 display a message to prompt the user to check the transmission confirmation mode if the transmission confirmation mode is OFF despite the altered transmission system is the Internet

facsimile transmission system or if the transmission
confirmation mode is ON despite the altered
transmission system is the PDF transmission when the
user designates the alternation of the transmission
5   system in accordance with the message displayed under
the control of the first informing control means.

In the next place, the operation of a digital
complex machine constructed as described above will be
explained below. The digital complex machine according
10 to the embodiment has a copying function, a printing
function or a G3 facsimile function or the like.
However, the operations for realizing these functions
are the same as those of the conventional digital
complex machine, so that the explanations thereof are
15 herein omitted but the operations of the Internet
facsimile function and the function for transmitting
the image to the computer terminal will be explained in
detail below.

At first, prior to explaining the operation of the
20 actual image transmission, the process for automati-
cally storing the terminal type information in the
transmission destination type storing table of the
information storing unit 14 upon receiving the
electronic mail will be explained.

25 The CPU 11 will perform the process upon receiving
the mail as shown in FIG. 4 if the electronic mail
addressed to itself arrives via the LAN circuit 5.

In this process upon receiving the mail, the CPU 11 at first checks whether the attached file is attached to the arrived electronic mail or not (step ST1). If the attached file is attached to the arrived electronic mail, the CPU 11 subsequently extracts the mail address of the transmitter from the electronic mail and checks whether this mail address has been already stored in the transmission destination type storing table of the information storing unit 14 (step ST2). Then, if the corresponding mail address is not stored in the transmission destination type storing table of the information storing unit 14, the CPU 11 stores the mail address of the electronic mail of the transmitter, which is received in this time, in the transmission destination type storing table of the information storing unit 14 (step ST3). Alternatively, if the corresponding mail address has been already stored in the transmission destination type storing table of the information storing unit 14, the CPU 11 passes the process at the step ST3.

Subsequently, the CPU 11 checks whether the attached file is a TIFF file in accordance with the ITU-T or not (step ST4). Then, if the attached file is the TIFF file in accordance with the ITU-T, the CPU 11 writes the terminal type information "IFAX" in a storage area of the terminal type information in accordance with a mail address of the transmitter in

the transmission destination type storing table of the
information storing unit 14 (step ST5). On the
contrary, if the attached file is not the TIFF file in
accordance with the ITU-T, but the attached file is,

5   for example, a PDF file or a bit map file or a TIFF
file not in accordance with the ITU-T such as an image
file of which resolution is a DPI (Dot Per Inch) or a
file of a particular application soft ware or the like,
the CPU 11 writes the terminal type information, i.e.,

10   "non-IFAX" in a storage area of the terminal type
information in accordance with a mail address of the
transmitter in the transmission destination terminal
type storage table of the information storing unit 14
(step ST6).

15   After that, the CPU 11 performs the receiving mail
process (step ST7). This receiving mail process serves
to perform various processes in accordance with a
content of the received electronic mail. For example,
if it is in accordance with an Internet facsimile

20   system of the ITU-T, an image is developed from the
attached file and the printer 18 prints out the image.

          Alternatively, when it is confirmed that the
attached file is not attached to the electronic mail,
which is received in this time in the step ST1, it is

25   not possible to perform the processes from the step ST2
to the step ST6. Therefore, the CPU 11 passe these
processes and shifts to the process in the step ST7 so

that it performs the receiving mail process.

Then, if this receiving mail process is terminated, the CPU 11 terminates the mail receiving process in this time.

If the original document is set on the scanner 17 and the image transmission is indicated via the computer network (a LAN and the Internet 7), the CPU 11 starts the image transmission process as shown in FIGS. 5 and 6.

In this image transmission process, at first, the CPU 11 receives the mail address of the transmission destination, the transmission system and the user designation by the transmission confirmation mode (step ST11 in FIG. 5). Subsequently, the image data to be generated by the scanner 17 is stored in the image storing unit 15.

In the next place, the CPU 11 checks whether the mail address designated in the step ST11 is stored in the transmission destination terminal type storage table of the information storing unit 14 or not (step ST13). Here, if the designated mail address is not stored in the transmission destination terminal type storage table of the information storing unit 14, the CPU 11 checks the user designation in the transmission system (step ST14) and the CPU 11 performs the well known Internet facsimile transmission (IFAX transmission) process or the PDF transmission process

(step ST15 or step ST16). If the image transmission is terminated, the CPU 11 terminates the image transmission process in this time.

On the contrary, if it is confirmed that the mail address designated in the step ST11 is stored in the transmission destination terminal type storage table of the information storing unit 14 in the step ST13, the CPU 11 checks whether the Internet facsimile transmission system is designated by the user's designation of the transmission system or not (step ST17 in FIG. 6).

If the Internet facsimile transmission system is designated, the CPU 11 checks whether the terminal type information is stored in the transmission destination terminal type storage table of the information storing unit 14 in association with a mail address designated in the step ST11 or not (step ST18). If the relevant terminal type information is stored, subsequently, the CPU 11 checks whether this terminal type information is "IFAX" or not (step ST19).

In the case that the relevant terminal type information is not "IFAX", namely, when the information of the transmission destination terminal type storage table of the information storing unit 14 indicates that a terminal type of a mail address of the transmission destination is not an Internet facsimile despite the user requires the Internet facsimile transmission, it

is possible to estimate that the user's designation
of the transmission system is not appropriate.
Accordingly, the CPU 11 makes the operating/displaying
unit 24 display a certain message having a content for

5   recommending the PDF transmission (step ST20). Then,
in this condition, the CPU 11 receives the user's
designation of the transmission system again (step
ST21) and checks whether the transmission system
designated in this time is the Internet facsimile

10   transmission system or not (step ST22).

In the case that the user designates the PDF
transmission in this time, namely, when the user alters
the transmission system according to the displayed
message, the CPU 11 subsequently checks whether ON of

15   the transmission confirmation mode is designated in the
step ST11 or not (step ST23). Then, if ON of the
transmission confirmation mode is designated, the CPU
11 makes the operating/displaying unit 24 display a
certain message having a content for recommending OFF

20   of the transmission confirmation mode (step ST24).
Then, in this condition, the CPU 11 receives the user's
designation of the transmission confirmation mode again
(step ST25) and performs the PDF transmission process
in an ON/OFF condition in the transmission confirmation

25   mode designated in this time (step ST26). Alter-
natively, if it is confirmed that OFF of the
transmission confirmation mode is designated in the

step S23, the CPU 11 passes the step ST24 and the step ST25 and shifts to the process in the step ST26 so that it performs the PDF transmission process in the ON/OFF condition of the transmission confirmation mode designated in the step ST11. Then, if this PDF transmission process is completed, the CPU 11 terminates the image transmission process in this time.

On the contrary, when it is confirmed that the terminal type information is not stored in the transmission destination terminal type storage table of the information storing unit 14 in association with the mail address designated in the step ST11 in the step ST18, when it is confirmed that the terminal type information stored in the transmission destination terminal type storage table of the information storing unit 14 in association with the mail address designated in the step ST11 is "IFAX" in the step ST19, and when it is confirmed that the transmission system designated in the step ST21 is the Internet facsimile transmission system in the step ST22, the CPU 11 performs the Internet facsimile transmission process in the ON/OFF condition of the transmission confirmation mode designated in the step ST11 (step ST27). Then, if this Internet facsimile transmission process is completed, the CPU 11 terminates the image transmission process in this time.

The operations when the user designates the

Internet facsimile transmission system as a
transmission system in the step ST11 are as described
above. On the contrary, if the PDF transmission
process is designated as a transmission system in the

5   step ST11, the CPU 11 checks whether the terminal type
information is stored in the transmission destination
terminal type storage table of the information storing
unit 14 in association with the mail address designated
in the step ST11 or not (step ST28). Then, if the

10   relevant terminal type information is stored therein,
the CPU 11 subsequently checks whether this terminal
type information is "non-IFAX" or not(step ST29).

    If the relevant terminal type information is not
"non-IFAX" in this case, namely, when the information

15   of the transmission destination terminal type storage
table of the information storing unit 14 indicates that
a terminal type of a mail address of the transmission
destination is an Internet facsimile despite the user
requires the PDF transmission, it is possible to

20   estimate that the user's designation of the
transmission system is not appropriate. Accordingly,
the CPU 11 makes the operating/displaying unit 24
display a certain message having a content for
recommending the Internet facsimile transmission (step

25   ST30). Then, in this condition, the CPU 11 receives
the user's designation of the transmission system again
(step ST31) and checks whether the transmission system

designated in this time is the PDF transmission or not (step ST32).

In the case that the user designates the PDF transmission in this time, namely, when the user alters the transmission system according to the displayed message, the CPU 11 subsequently checks whether OFF of the transmission confirmation mode is designated in the step ST11 or not (step ST33). Then, if OFF of the transmission confirmation mode is designated, the CPU 11 makes the operating/displaying unit 24 display a certain message having a content for recommending ON of the transmission confirmation mode (step ST34). Then, in this condition, the CPU 11 receives the user's designation of the transmission confirmation mode again (step ST35), shifts to the process of the step ST27 and performs the Internet facsimile transmission process in an ON/OFF condition in the transmission confirmation mode designated in the step ST35. Alternatively, if it is confirmed that ON of the transmission confirmation mode is designated in the step S33, the CPU 11 passes the step ST34 and the step ST35 and shifts to the process in the step ST27 so that it performs the Internet facsimile transmission process in the ON/OFF condition of the transmission confirmation mode designated in the step ST11.

On the contrary, when it is confirmed that the terminal type information is not stored in the

transmission destination terminal type storage table of the information storing unit 14 in association with the mail address designated in the step ST28 in the step ST18, when it is confirmed that the terminal type

5   information stored in the transmission destination terminal type storage table of the information storing unit 14 in association with the mail address designated in the step ST11 is "non-IFAX" in the step ST29, and when it is confirmed that the transmission system

10   designated in the step ST31 is the PDF transmission system in the step ST32, the CPU 11 shifts to the process of the step ST26 and performs the PDF transmission process in the ON/OFF condition of the transmission confirmation mode designated in the

15   step ST11.

As described above, according to the embodiment, when the transmission system designated by the user is different from the transmission system which is appropriate for a terminal type of a terminal type

20   indicated by the terminal type information stored in the transmission destination terminal type storage table of the information storing unit 14 in association with the mail address designated as a transmission destination, a message is displayed to prompt the user

25   to alter the transmission method. Therefore, if the user designates the transmission system by mistake, the user is capable of knowing this fact, so that it is

possible to prevent the useless image transmission in a wrong transmission system by designating an appropriate transmission system again.

Alternatively, according to the embodiment, upon receiving an electronic mail attached with the attached file, a terminal type of a transmitter of the electronic mail is identified on the basis of a file format of this attached file and the terminal type information is automatically stored in the transmission destination terminal type storage table of the information storing unit 14 on the basis of the identified terminal type, so that it is not necessary for the user to check the terminal type of the partner's terminal or to register the terminal type information. As a result, it is very convenient for the user.

Further, according to the embodiment, when ON of the transmission confirmation mode is designated when the user alters the designation of the transmission system from the Internet facsimile transmission to the PDF transmission, or when OFF of the transmission confirmation mode is designated when the user alters the designation of the transmission system from the PDF transmission to the Internet facsimile transmission, a message is displayed so as to prompt to alter the designation of the transmission confirmation mode. The Internet facsimile terminal normally has a function for

returning an information mail in response to the transmission confirmation request, so that it is effective to use a transmission confirmation mode. On the contrary, a function for returning an information mail in response to the transmission confirmation request is not generally used in the computer terminal and there is a low probability that the receiving side transmits the information mail even if the transmitting side uses the transmission confirmation mode, so that there may be a possibility that the usage of the transmission confirmation mode only results in complication of the process. On this account, when the user tries to perform the Internet facsimile transmission, the transmission confirmation mode is designated as ON. On the contrary, when the user tries to perform the PDF transmission, there is a high probability that the transmission confirmation mode is designated as OFF. After the Internet facsimile transmission is performed, the transmission confirmation mode remains to be designated as ON and after the PDF transmission is performed, the transmission confirmation mode remains to be designated as OFF.

If the transmission system is only changed from such a condition, a relation between the transmission system and the transmission confirmation mode becomes inappropriate. In such a case, the user is capable of

knowing that a relation between the transmission system and the transmission confirmation mode becomes inappropriate, so that it becomes possible to perform the appropriate image transmission by designating a correct transmission confirmation mode condition again.

Alternatively, the present invention is not limited to the above described embodiment. For example, according to the above described embodiment, when the relevant terminal type information is not "IFAX", namely, when the information of the transmission destination terminal type storage table of the information storing unit 14 indicates that a terminal type of a mail address of the transmission destination is not an Internet facsimile despite the user requires the Internet facsimile transmission, the processes from the steps S20 to S22 are performed. However, these processes may be omitted. That is, when a terminal type of a mail address of a transmission destination is not the Internet facsimile even if the user requires the Internet facsimile transmission, it is estimated that the terminal type of the mail address of the transmission destination is a personal computer (PC). Accordingly, when a software capable of reading an image file of a TIFF file is loaded in a PC, there is no problem even if the image file of the TIFF file is transmitted to the PC, so that the information may be not provided.

For example, according to the above described embodiment, the terminal type information is automatically written in the transmission destination terminal type storage table of the information storing unit 14. However, the terminal type information designated by the user may be written therein.

Alternatively, according to the above described embodiment, the informing operation to prompt the user to check the designation of the transmission system and the informing operation to prompt the user to check the designation of the transmission confirmation mode are performed by displaying a message. However, for example, the informing operation may be performed in other manner such as reproducing a voice message or the like. Alternatively, an information command is transmitted to a computer terminal connected via the LAN circuit 5 and the informing operation may be performed at the computer terminal side.

Additionally, according to the above described embodiment, when a mail address which is not stored in the transmission destination terminal type storage table of the information storing unit 14, is a mail address of a transmitter of the received electronic mail, this mail address is stored in the transmission destination terminal type storage table of the information storing unit 14 and further, its terminal type information is stored in association with this

mail address.   However, the terminal type information may be stored only with respect to a mail address stored in the transmission destination terminal type storage table of the information storing unit 14 in advance, namely, a mail address registered by the user in advance.   Hereby, it is possible to prevent a junk mail.

Further, according to the above described embodiment, an example such that the present invention is applied to a digital complex machine is described. However, for example, it is possible to realize the present invention as a device, which is formed otherwise such as a device only having a function to transfer the image.

Alternatively, according to the above described embodiment, an Internet facsimile system defined by the ITU-T is used.   However, the present invention can be applied in the case of using other Internet facsimile system such as a system which is uniquely defined, or the like.

Additionally, according to the above described embodiment, it is decided whether the transmission confirmation mode is used or not depending on the user's designation.   However, for example, it is also possible that the transmission confirmation mode is automatically used upon the IFAX transmission and the transmission confirmation mode is not used upon the PDF

transmission.

Additional advantages and modifications will readily occur to those skilled in the art. Therefore, the invention in its broader aspects is not limited to the specific details and representative embodiments shown and described herein. Accordingly, various modifications may be made without departing from the spirit or scope of the general inventive concept as defined by the appended claims and their equivalents.